Section 6: Washington's Energy Strategy

I. Background

In 1991, the Legislature instructed the Governor to appoint a group of 20 citizens, representatives of business and industry, and public officials to recommend a strategy that would work toward assuring Washington residents of adequate, economical, and reliable energy while protecting the environment and promoting economic development. The Washington State Energy Strategy is the result of the Committee's work.

The Energy Strategy Committee developed an energy strategy that emphasizes economic well-being and environmental protection. The Energy Strategy was useful, not because it presented a completely new set of energy-related recommendations, but because it consolidated these actions into a single, organized framework to guide Washington's decisions about energy sources and use. The recommendations in Washington's Energy Strategy rely on known cost-effective technologies, beginning with improved efficiency, renewable resources, and wise use of natural gas.

Washington's Energy Strategy is organized into five main topic areas:

- Transportation Challenges;
- Energy for Buildings, Farms, and Industry;
- Protecting Our Environment;
- Siting Energy Facilities; and
- Public Awareness and Education.

In 1994, the Legislature enacted ESB 6493, which made Washington's Energy Strategy the primary guidance for implementation of the state's energy policy. The legislation also provides for a public process to update the Strategy as needed.

II. Governor's Executive Order

Also in 1994, Governor Lowry signed Executive Order 94-01 implementing the Washington Energy Strategy. The Executive Order:

- Determined that the Washington Energy Strategy shall be the policy framework for energy decisions made by state agencies.
- Named the Washington State Energy Office (now the Department of Community, Trade and Economic Development (CTED)) as the lead agency for implementing the Washington Energy Strategy.
- Directed the Washington State Energy Office (now CTED) to convene an interagency working group to ensure efficient coordination and pursue implementation of the most promising policy alternatives in the Strategy.

III. Interagency Working Group

The Interagency Working Group meets several times a year and receives periodic written updates on energy issues when appropriate. In addition to the eight agencies specified in the Executive Order, six additional agencies participate regularly in the working group. During this biennium, the working group explored activities related to the Energy Strategy recommendations through a series of informational presentations given by staff from a number of state agencies. The format also provided a framework for action items, formation of subcommittees, and follow up on Energy Strategy-related activities.

During the course of the meetings during this biennium, the following issues were presented for consideration and discussion by the working group:

The transfer of responsibilities for energy programs and activities to CTED, Washington State University (WSU), the Department of General Administration (GA), and the Department of Transportation following the 1996 closure of the Washington State Energy Office; electric industry restructuring; energy-related legislative tax issues; a presentation by the U.S. Department of Energy on the federal executive order on energy efficiency in buildings; presentations by WSU Energy Program, Washington Interactive Television, and the Utilities and Transportation Commission on developing substitutes for transportation such as telework, teleconferencing, and telecommunications; a presentation by the Energy Facility Site Evaluation Council on the Cross Cascade Pipeline proposal; an update on the U.S. Department of Energy's Million Solar Roof Program; previews of energy legislation possibilities before each legislative session; outcomes and implications following each legislative session; a presentation by Washington State University Energy Program on the solar potential in Washington State; a presentation by WSU Energy Program on the energy impacts of global climate change; an overview of the Electric System Study performed under ESSB 6560; and a presentation on the Year 2000 and electric utilities.

IV. The Public Sector Committee and Energy Efficiency in Public Buildings

During 1998, the Energy Strategy Public Sector Committee composed of representatives from GA, Corrections, Department of Social and Health Services, CTED, the Utilities and Transportation Commission, GA's Office of State Procurement, the Superintendent of Public Instruction, the Puget Sound Educational Service District, and WSU met several times to discuss ways to encourage energy and resource efficiency in public facilities. The Committee engaged both the budget and policy sections of the Office of Financial Management on the opportunities and barriers to increased efficiency in public buildings. The group also decided to focus initially on policies to reduce utility costs and increase energy efficiency in executive branch agencies.

Executive Order 97-03, Quality Improvement, calls for each state agency to "develop and implement a program to improve the quality, efficiency, and effectiveness of public services it provides through quality improvement, business process redesign, employee involvement, and other quality improvement techniques." The Committee determined that the quality improvement process, now underway in all executive agencies, could provide an excellent vehicle for promoting and implementing energy and resource efficiency. The Committee activities in 1999 will be directed toward incorporating resource efficiency into agency quality initiative processes.

In addition, the Engineering and Architectural Services program at the Department of General Administration continued to expand the range and type of energy and resource efficiency services it has available. These include resource conservation management, building commissioning, energy life-cycle analysis for new and remodeled buildings, the plant operations support program, energy service performance contracting for all public agencies (state, schools, local governments, etc.), and sustainable design and construction.

V. Status of Energy Strategy Recommendations

Energy Policy staff have developed a matrix to monitor the implementation of recommendations in the Energy Strategy. This list of recommendations, agencies assigned to address those recommendations, and brief status descriptions are following.

Energy Strategy Recommendation Status as of September 1, 1998

Note to the reader: The Washington State Energy Office was closed in 1996, and its functions distributed to other state agencies. The last section of this matrix describes which agencies presently perform these function; explains the acronyms used in this report; and provides websites for the agencies involved in updating the status of the Energy Strategy recommendations.

Energy Strategy Recommendations	Agencies Involved as of 9/1/98	Status
TRANSPORTATION CHALLENGES		
Least Cost Planning		
Washington State Department of Transportation (DOT) should establish a least-cost planning process that is integrated, objective, fair, public and lowest cost.	DOT	DOT is completing a case study on least cost planning, which will lead to guidelines to be used by the year 2000 or whenever regional transportation plans are updated.
Changing the Ways People Travel		
The State should make cost-effective investments to improve the rail system for greater use in the Vancouver, BC to Portland corridor.	DOT	DOT currently is sponsoring two daily trips to Portland, Oregon and one daily trip to Vancouver, BC. Travel time to Portland has been reduced by 25 minutes to 3.5 hours. Expectations are that in 1999 new equipment and additional service will be on line.
The State should complete construction of Puget Sound area High Occupancy Vehicle (HOV) lanes; arterial connections to the system; ramp access; and the parking, pedestrian, and bicycle access necessary for bus and vanpool use.	DOT	As of July 1998, 158 miles of HOV are opened to traffic. Thirty-three miles of HOV are in design, and 75 miles planned but not yet funded. HOV construction is coordinated with the Regional Transit Authority and regional governments.
WSEO *(now DOT)* should promote successful implementation of the Commute Trip Reduction (CTR) Law, encouraging employer and employee use of transportation demand management.	DOT	The CTR program was officially transferred to DOT in 1996. In 1997 the Legislature increased the collaboration among employers, local jurisdictions and transit agencies. It also extended the program through June 2006. In 1998 the Legislature granted additional funding to increase the availability of vans and encourage employers to support employee commuting financially. By 1998 over 900 worksites in nine counties were implementing CTR programs. Throughout 1998 and 1999 DOT will work with local jurisdictions and employers to improve the program and further reduce dependence on single-occupant vehicles.

DOT, cities, and counties should provide opportunities for safer and more accessible bicycle and foot transportation directly into core city areas.	DOT	The DOT Bicycle and Pedestrian Program has created the Bicycle and Pedestrian Chapter of the Washington Transportation Plan. The Plan aims to double bicycle and pedestrian trips, and to reduce accidents. DOT has established partnerships with local governments, transit agencies, and the Transportation Improvement Board. DOT has secured $3 million to address dangerous student walk routes.
DOT should develop a specific proposal for a congestion pricing pilot program, whereby users of highways would be charged during peak period.	DOT	DOT considered a Congestion Pricing Project under its Public Private Partnerships initiative. The project did not attract the requisite public or legislative support necessary for success, and it was not implemented.

Developing Substitutes for Transportation		
The Washington Utilities and Transportation Commission (UTC) should work with WSEO *(now WSU)* to assess the long-term ability of communications technology to substitute for transportation.	UTC WSU	Communications technology has changed rapidly since the Energy Strategy was adopted. The rapid market penetration of personal computing, the World Wide Web, and higher capacity telecommunications mean these technologies are increasingly available as substitutes for transportation. Government agencies and intitutions of higher education are using telecommunications technology to reduce travel by increasing the use of video conferencing and distance education.
The State should encourage the establishment of centralized "telework centers" in urban and suburban areas.	DOT WSU	No current activity
The State should locate significant State office facilities in non-metropolitan areas, using telecommunications to provide needed information links.	GA	The State now has three workstations at the North Cascades Gateway Center in Sedro Woolley, two sites at the Washington State Training and Conference Center in Burien, and sites in Yakima, Kelso, Tacoma, and Everett.
The State should develop a model telecommuting program and policies that could be adapted by government agencies and the private sector.	WSU GA	Completed and available through GA as part of State Government CTR Guidelines.
The Department of Information Services (DIS) should continue to work with public and private organizations to use interactive technologies as an alternative to travel.	DIS	DIS/Washington Interactive Technologies (WIT) operates a statewide network of six videoconference centers. The knowledge gained in launching the WIT network was utilized in developing the K-20 network, which will equip almost 600 schools and universities with videoconferencing and access to the internet. WIT's award winning bridging network provides connectivity to videoconferencing rooms worldwide. In addition agencies are using WIT's interactive satellite broadcast services to provide training for large audiences over the entire NW region of the US. These services have resulted in estimated cost savings of over 13 million dollars, primarily through reduction of State agency travel costs, since WIT's inception in 1993. Currently WIT is working to assist in reducing travel costs further by developing new on-line, and just-in-time training services that will be accessible from each individual State employee's workstation. In addition DIS is working to make government more accessible to State citizens through interactive technology and the internet.
The UTC and telecommunications companies should consider tariffs to encourage widespread access to services providing simultaneous transmission of voice and data.	UTC	UTC approved tariffs for ADSL (Asymmetrical Digital Subscriber Line) on July 9, 1998 to improve voice/data transmission for US West. GTE is expected to file a tariff for the same service soon. ADSL technology will have highest impact in metropolitan areas due to some physical limitations that make it impractical in more rural areas.

Using Alternative Fuels		
The Department of Ecology (DOE), GA, and WSEO *(now WSU)* should work together to ensure that current State purchasing requirements for clean-burning vehicles fit federal mandates.	DOE GA WSU	These agencies continue to work closely with federal agencies that are developing alternative fuel vehicle requirements. GA now has alternative fuel vehicles on State contract. This contract is available to state agencies and all public subdivisions
The State should develop the infrastructure necessary for alternative fuel experiments. WSEO *(now WSU)* should track those experiments.	WSU	WSU successfully teamed with the City of Seattle and other local jurisdictions to form the Puget Sound Clean Cities Coalition.
The public should be advised on conversions of private vehicles to a specific alternative fuel only when results of alternative fuel experiments are clearly known.	WSU	The WSU Energy Program alternative fuel activities include the following: Working with regional natural gas utilities (Puget Sound Energy, BC Gas, Northwest Natural Gas and Washington Water Power) to explore ways of creating a compressed natural gas fueling corridor along I-5; Implementing a universal fuel card system to allow networking of existing and future natural gas fueling stations in the Puget Sound area: Supporting Sound Transit investigation of advanced technology buses; Setting up a demonstration program with King County/ Metro to investigate the feasibility of operating natural gas vanpools; Setting up a demonstration program with Seattle City Light to investigate the use of electric vehicles; Working with University of Washington to explore the use of neighborhood electric vehicles (NEVs) for on-campus applications; Working with WSDOT to allow commute trip reduction credits for alternative fuel vehicles; Supporting the City of Spokane alternative fuel market activities including the creation of the Northwest Inland Empire Clean City Coalition; and Reporting Washington State alternative fuel vehicle acquisitions to the U.S. Department of Energy as required by the National Energy Policy Act.
DOE should develop emissions performance standards for alternative fuel vehicles.	DOE	Ongoing. Washington State is purchasing low-emission vehicles based on its performance standard. Over 1000 vehicles have been purchased using this standard.
WSEO, DOT, and the Department of Revenue (DOR) should better define "alternative fuels" and establish a clearer basis than now exists for differential tax treatment.	DOT DOR	No current action.
WSEO and DOE should explore the development of a cooperative West Coast (British Columbia, Washington, Oregon, and California) effort to ensure maximum learning, minimal duplication of effort, and development of a larger market for low-emission vehicles.	DOE	Ongoing. The West Coast agencies are in close contact regarding alternative-fuel vehicle actions and anticipate working together on an emissions labeling effort. British Columbia is looking at adopting California emissions standards. State agencies are investigating options for a “green car” purchasing compact.

Improving Freight Mobility		
The UTC should work to improve the energy efficiency of the trucking industry by developing regulatory mechanisms that promote cost-effective and efficient use of fuel.	UTC	No action; State regulation of trucking was abolished by federal legislation.
The State should revitalize the state rail abandonment program to avoid further railroad right-of-way losses and, where appropriate, purchase and preserve abandoned rights-of-way for use as transportation corridors.	DOT	DOT has an ongoing Rail Banking Program by which abandoned rail corridors are bought and banked for future use. Examples are Yelm to Tenino; Othello to Royal City; and White Swan to Toppenish.
DOT should examine ways to promote broader use of rail freight options.	DOT	Legislation required DOT to establish a Freight and Goods Transportation System. This is now in progress. DOT is exploring establishing a Tacoma to Everett "FAST" Corridor to expedite freight via grade separation and dedicated rights-of-way. Governor Locke has appointed a Freight Mobility Strategic Investment Board to determine the best approach to facilitating freight movement.
Improving Vehicle Efficiency		
The State should seek our Congressional delegation's support for increased federal Corporate Average Fuel Efficiency (CAFE) standards.	DOT DOE	No current action.
The State should propose that the western states expand purchasing consortia to include vehicle fleet purchases, with the aim of stimulating auto manufacturers to develop safe, higher-mileage, and lower-emission vehicles.	GA	***GA works closely with DOE and its Green Vehicle Program, which addresses low-emission certified vehicles.***
DOR, Licensing, and WSEO should develop a proposal for the 1994 legislative session to change the current license registration and excise tax system, so that it charges less for vehicles with better mileage/emissions performance and more for vehicles with poor performance.	DOR DOL	The registration and tax system was not changed to an efficiency basis. No current action is planned.
Funding Alternatives		
The State should examine all transportation funds and reprogram the funds to promote efficiency goals.	DOT UTC	Reprogramming or realigning transportation funds would require legislative approval and possibly a constitutional change to the 18th amendment. These actions have not been taken.

The State should realign existing taxes to reinforce policy goals, particularly to ensure that tax structures do not provide incentives to increase vehicle miles traveled, increase emissions, or decrease vehicle efficiency.	DOT Legislature	Reprogramming or realigning transportation funds would require legislative approval and possibly a constitutional change to the 18th amendment. These actions have not been taken. In 1998 the Legislature authorized Referendum 49 which would reduce motor vehicle excise taxes be reduced and reallocate state revenues reallocated; approve $1.9 billion in bonds for state and local highways; and modify spending limits. This referendum passed with a 58% approval rating.
The State should take advantage of available federal funds for developing new programs or technologies.	DOT	Continuing effort. DOT aggressively seeks federal demonstration, research and other funds. DOT has been particularly successful in attracting federal Intelligent Transportation System funds for various projects.
The State should raise new revenue by taxing the commodity or activity causing the problem. Revenue alternatives that merit consideration include: raising the fuel tax; extending the sales tax to sales of vehicle fuels; repealing tax exemptions for alternative fuels; and repealing the 18th Amendment to the State constitution so that existing gas tax money may be used for other transportation needs besides highways.	DOT Legislature	These actions have not been taken. In 1998 the Legislature authorized Referendum 49 which would reduce motor vehicle excise taxes and reallocate state revenues; approve $1.9 billion in bonds for state and local highways; and modify spending limits. This referendum passed with a 58% approval rating.

Growth Planning for Energy Efficiency		
DOT and WSEO *(now CTED and WSU)* should jointly develop a technical assistance program for local planners on the energy implications of different growth planning strategies.	CTED WSU DOT	The three agencies jointly publish a manual entitled, "Energy and the Growth Management Act: Model Language for Local Governments' Comprehensive Plans." The Energy Policy Group is now located in CTED along with as Growth Management and participates in the Growth Management Interagency Working Group. WSU continues to develop computer models related to community utility infrastructure.
WSEO *(now CTED and WSU)* should work with other interested parties to develop models for planners that demonstrate energy implications of alternative urban designs; help local governments enact solar ordinances; and advocate comprehensive plans that preserve opportunities for efficient renewable energy projects.	CTED WSU	WSU provides technical assistance in the areas of combined heat and power and district energy, as well as renewable resource development. The Energy Policy Group is now located in CTED along with Growth Management and participates in the Growth Management Interagency Working Group.

ENERGY FOR BUILDINGS, FARMS, INDUSTRY

Natural Gas Planning		
The State's gas utilities should work closely with CTED and the UTC to develop and implement comprehensive least-cost planning.	UTC CTED	All gas utilities have least cost plans on file.
Gas utilities should implement cost-effective conservation measures and programs in their service territories consistent with their least-cost plans.	UTC CTED	Puget Sound Energy has a small program for natural gas demand side management including an information-based program and a water heater rebate program. Washington Water Power (WWP) has no conservation programs for natural gas; however, it does have a tariff-rider funding mechanism in place should cost-effective conservation actions be identified. Cascade Natural Gas Co. and Northwest Natural Gas companies do not have DSM tariffs on file and have negligible programs for achieving energy efficiency in their Washington service territories. The declining cost of natural gas means that fewer measures are cost-effective.
The State's electric and gas utilities should work closely with WSEO (*now CTED*) and the UTC to integrate their least-cost planning.	UTC CTED	Puget Sound Energy, which serves the Puget Sound area, is producing two plans – one for gas and one for electricity customers. WWP, which serves parts of Washington near Spokane, has two plans. In neither case are these plans integrated across fuels.
WSEO (*now CTED*), in cooperation with UTC, utilities, the Bonneville Power Administration (BPA), and the Northwest Power Planning Council (NWPPC), should provide a report to the Governor and Legislature clearly identifying the nature and extent of savings available from cost-effective fuel choice.	UTC CTED	The report "Fuel Blind Integrated Resource Planning Project" was published. There has been no recent activity on this strategy.
UTC should change its line extension policy to develop new pricing methods to permit recovery of costs from lower volume lines.	UTC CTED	Line extension tariffs are on file for each company.

The State should encourage electric utilities to consider fuel choice as a resource in their least-cost planning and to implement appropriate programs.	UTC CTED	Many utilities are reluctant to pursue aggressive fuel switching programs due to potential loss of revenue. Snohomish PUD, Puget Sound Energy and Washington Water Power (WWP) are the only utilities that have implemented fuel-switching programs. PSE offers this service to a limited number of low-income customers under its non-tariff program. WWP continues to offer information to guide consumers to switch to natural gas. WWP funds a low-income weatherization program that implements fuel switching to natural gas for qualifying structures. The Northwest Energy Efficiency Alliance has funded a project to work with low-income residents and Housing Authorities that includes support for fuel switching as cost-effective for these consumers.
The State should encourage BPA to review its new experimental fuel choice program and refine it where it can be shown that fuel choice is cost-effective and reduces the need to use gas for electricity generation.	NWPPC UTC CTED	BPA is allocating $15-30 million per year on energy efficiency activities. This is a drop from several hundred million dollars per year in the past. It is unlikely that these limited funds will be allocated to fuel switching activities.
The State's gas a nd electric utilities should provide clear information to support cost-effective fuel choices.	UTC	Under restructuring, utilities are providing information to builders. The majority of units now use gas for heating if it is available, which coincides with expectations based on cost. The UTC no longer regulates this activity.
Gas Policy and Siting		
WSEO (*now CTED*), in coordination with the state's electric and gas utilities and customers, should develop regular statewide estimates of natural gas use.	CTED	This activity is ongoing as part of the Washington State Energy Use Profile.
WSEO (*now CTED*) and the Department of Natural Resources (DNR) should closely monitor coal bed methane to determine its potential as an indigenous gas supply that could be developed without new interstate pipeline capacity.	DNR CTED	Although the last well into a coal bed was plugged and abandoned in 1993, DNR continues to monitor for interest.
WSEO (*now CTED*) should develop ways to track the efficiency of natural gas use in the state.	CTED	Natural gas consumption and price are tracked on an ongoing bases as part of CTED's energy indicators project.

Conservation in Use of Electricity		
The State should support the aggressive pursuit of all cost-effective conservation and efficiency opportunities in both public and private utility markets.	UTC WSU CTED	The pursuit has become less aggressive recently, for a variety of reasons. Competitive pressures induce cost cutting -- including investments in conservation and efficiency projects -- in order to reduce immediate rates. It is for this reason that BPA, once the major funder of public utility efficiency projects, no longer does so. For the same reason, these public utilities are reducing their spending in all areas. Competitive pressures also induce companies to measure efficiency investments against investments such as mergers and acquisitions, which may have higher rates of return.
The State should support the effort to develop and implement regulatory approaches that align private utilities' financial interests with the successful implementation of their least-cost plans.	UTC CTED	This recommendation has been overwhelmed amidst discussions of restructuring. Some industry leaders theorize that a fully functional competitive industry would send the appropriate price signals to encourage efficient use of energy. Other leaders would pursue an approach like that adopted by PacifiCorp in Oregon (summer, 1998) which disassociates revenue earned from kilowatt-hours sold.
BPA should develop better incentives and market conditions to ensure the successes of conservation investments in service areas of public utilities -- both larger utilities in major urban growth areas and smaller utilities in slow-load growth areas.	CTED	CTED has long supported BPA taking a larger role in conservation and other public purposes and has worked, the NWPPC, the Comprehensive Review, the Transition Board and in BPA forums and work groups to encourage BPA to do so. BPA's rate discount proposal as part of Subscription is a welcome step in the right direction since it meets the strategic objective of providing incentives for conservation to all of its utility customers.
The State should regularly revise state commercial and residential building codes to achieve the region's conservation targets.	CTED	The non-residential energy code underwent its last major revision in 1994. The residential code was partially revised in 1997, but retained most of the energy efficiency provisions included in the 1991 version. The next scheduled code revision cycle will be in 1999-2000, when the State begins to shift to the new codes developed by the International Code Council. CTED will keep informed of energy code developments by way of Building Code Council staff and WSU.
BPA and the investor-owned gas and electric utilities should include the cost of supporting code implementation (education, training, and enforcement) as a high priority for funding.	UTC CTED WSU	BPA and the investor owned utilities fund the NEEA. NEEA is actively promoting energy efficient building practices. There may be limited funds available to support code development or code analysis as part of promoting efficient building practices. Neither utilities nor BPA is currently funding code enforcement; there are no plans for them to fund future enforcement.

The NWPPC, WSEO *(now WSU)*, UTC, BPA, and utilities should cooperate in the development of a set of standard and uniform principles for evaluating cost-effectiveness and verifying the performance of BPA and utility financed conservation measures.	UTC CTED WSU	The NWPPC is working with BPA and other energy partners in the region to create a Regional Technical Forum (RTF). Its responsibilities include developing standard evaluation methodologies, and verifying or tracking energy conservation in the region. They may also be charged with developing BPA's energy efficiency subscription option. CTED staff provided comments and testimony supporting the RTF.
The State and region should take full advantage of all federal funds available for supporting conservation technology transfer and demonstration.	CTED DOE WSU	The WSU Energy Program has competed well in bringing new federal funds into the state for energy projects. WSU has received five new U. S. Department of Energy special projects for FY99. Funding for these projects is competitive, and Washington has traditionally done very well in competition. WSU is negotiating to host the national codes conference in Washington in 1999. CTED continues to provide policy support to the U.S. Department of Energy and the U.S. Environmental Protection Agency for energy efficiency and renewable energy programs.
The State Board for Community and Technical Colleges and the Higher Education Coordinating Board should develop curricula and provide training and certification programs for energy-related specializations.	WSU	No current activity.
The State should vigorously pursue programs that ensure that the public buildings are constructed and operated to use energy efficiently.	GA	Revised Energy Life Cycle Cost Analysis Guidelines for public agencies were published in 1998. All guidelines and spreadsheets are now available via the Internet at www.ga.wa.gov/eas/elcca. GA is actively promoting building commissioning through a pilot project with K-12 schools, higher education, cities, counties, state and federal agencies. GA manages the Plant Operations Support Program, a consortium of facilities managers and operators who share informative and operationally oriented information with other facility managers. Additional information is available at http://www.ga.gov/plant/plantops.htm.

Improving System Efficiencies		
The State should support cooperative multi-state analyses of the opportunity for greater seasonal electricity exchanges along the Pacific Coast.	UTC CTED	The western region has had an active wholesale power market for many years, now supported and encouraged by FERC through its Order 888. While development of a western region Independent Grid Operator (IndeGo) has stalled, the west already benefits from open wholesale markets. One mitigating factor, however, has been the derating of the Pacific Intertie due to concerns over system reliability. The Western Systems Coordinating Council is responsible for these system operating parameters. The UTC participates in ongoing regional and national discussions, through National Association of Regulatory Utility Commissioners, aimed at assuring continued system reliability as more players participate in the wholesale market. The UTC actively followed and commented on the development of the IndeGo proposal and now is tracking discussion of the next potential regional body called an Independent Grid Scheduler.
BPA should improve policies to boost access to interstate transmission lines and should examine shared ownership options.	UTC CTED	Bonneville has implemented open access transmission to a significant degree. The formation of a regional independent grid operator has been investigated but activities were terminated primarily because of cost shifting concerns. FERC may decide to order formation of such entities. BPA was a participant in the development of the IndeGo proposal, despite the fact that it expressed doubts over its authority to physically join such an organization.
The U.S. Bureau of Reclamation and the U.S. Army Corps of Engineers should include turbine efficiency improvements in their budgets and promptly implement measures, in view of rising regional power demand and the low cost and impact of these resources.	NWPPC	No current action. The Corps and the Bureau have implemented turbine efficiency improvements when funding has been available. An up-to-date compilation is not yet available.
Renewable Energy Sources		
Utilities and BPA should experiment with targeted solicitations for renewable resources that are nearly competitive with gas.	CTED	This recommendation is outdated based on changes in the industry since the Energy Strategy was written. BPA has created the Bonneville Environmental Foundation to fund investments in renewable energy resources and to market that power to customers. Other Northwest utilities are investigating "green power" development and purchases. CTED is tracking developments and encouraging renewable resource development and policies.

NWPPC, BPA, UTC, and utilities should move quickly to improve their ability to evaluate the full range of benefits from renewable energy technologies.	WSU UTC CTED	The NWPPC continues to inventory and evaluate renewable energy projects and technologies. WSU's energy program remains the main State level involvement in biomass, photovoltaics, geothermal, and related renewable energy technologies CTED and the UTC are developing a report to the Legislature in response to Senate Bill 6560 of the 1998 session that will address current levels of investment in renewable resource technologies in the region.
The State should consider renewable energy projects, such as wind turbines, suitable on parcels of land designated as range land or open space.	DNR CTED Fish & Wildlife	Agencies worked with the DNR to quantify the value of State owned land that could be used for wind energy development. Counties are currently taxing wind farm land at rates that do not discourage wind energy development. No further action seems needed at this time.
Non-utility Fuels		
The State should support wide dissemination to homeowners and building operators of information describing practical opportunities to improve the efficiency of buildings using petroleum, coal, and wood.	WSU	WSU's Energy Ideas Clearinghouse program, funded by the Northwest Energy Efficiency Alliance, provides a wide range of information and technical assistance on energy efficiency opportunities for builders and operators of commercial, industrial, and residential facilities in the northwest, including those using petroleum, coal, and wood.
The State should support actions to improve efficiency in the use of non-utility fuels in public buildings.	GA WSU	Through the Energy Life Cycle Cost process, GA staff work closely with public entities and their consultants to ensure renewable resources are seriously considered when doing energy life cycle cost analyses of new construction projects and remodels.

Low-income Assistance		
The State should support funding that addresses the energy needs of low-income citizens.	CTED UTC	The UTC supports the concepts of on-going public purpose spending as outlined in the Regional Review. All three investor-owned utilities have demand side management programs, which contain low-income assistance components. CTED is working with the Affordable Housing Advisory Board to integrate residential energy efficiency services with other affordable housing programs. The Housing Trust Fund received an appropriation for the 97-99 biennium for weatherization. The appropriation matches funds from utilities, rental owners and other entities. CTED also participated in utility collaboratives and technical advisory groups during demand side management planning. It supported funding of The Energy Project, a joint leveraging/education effort between CTED and the Association of Community Action Agencies. Future activities include: 1) Justify continued Housing Trust Fund funding. 2) Support continued funding and activities of The Energy Project. 3) Support increased federal funding, including BPA funds.
CTED should work with WSEO, the AG's Office, and electric and gas utilities to ensure that low-income weatherization programs address energy savings for the largest number of low-income citizens possible.	CTED UTC	As reported above, CTED has worked this biennium and continues to work with: • Affordable Housing Advisory Board • UTC • Utility collaboratives and technical advisory groups • Interagency Energy Strategy Working Group • BPA
Energy Education		
The State should support education activities that increase the energy literacy of Washington citizens.	CTED WSU SPI	CTED is advocating for utilities to fund K-12 resource education programs that address energy education. CTED is requesting that PSE modify PSE's current education program to change it from a program offered by consultants to a program that trains teachers to provide the curriculum. CTED is supporting WWP/Avista's efforts to develop a K-12 education program to enhance its resource conservation manager program in the schools. CTED is also conducting some secondary research into the role of education and marketing in achieving conservation and renewable resource development. WSU provides fact sheets, a library, education and training for a fee, and a web site. No current activity by SPI.

The Legislature should provide funds to SPI to produce the second phase of the "Energy, Food, and You" curriculum.	SPI	Funding was not provided. Information in the curriculum is now seriously out of date.
WSEO *(now CTED and WSU)* should survey utilities and building operators and advise the Higher Education Coordinating Board about what programs should be developed to train technicians and system operators for conservation and efficiency work in the residential, commercial, and industrial sectors.	CTED WSU	The Northwest Energy Efficiency Council (NEEC) is now offering a comprehensive building operator training program supported with funds for the NEEA. This program includes coordination and cooperation with the State's community colleges and vocational/technical schools.
The State's universities should examine their engineering and architecture programs to ensure that tomorrow's professional graduates are prepared to design facilities of all kinds with energy use in mind.	WSU HEC	WSU Energy Program staff has contacted WSU's Interdisciplinary Design Institute (IDI), a fifth year architecture program that includes construction management, interior design, and landscape architecture, to explore the possibility of including energy and resource conservation in their curriculum. WSU Energy Program could provide guest lectures, conduct energy and resource conservation presentations, seminars, and workshops; serve as a resource for students; work with IDI on internships, special projects, independent studies, and collaborate in research activities. Although both WSU programs were enthusiastic about the possibility of working together, the details and logistics are still being worked out.
Higher education programs should include energy education units in pre-service and in-service teacher training.	HEC	No current activity.

PROTECTING OUR ENVIRONMENT

Carbon Dioxide and Global Warming		
WSEO *(now WSU)* should develop a more comprehensive inventory and projection of carbon dioxide and other greenhouse gas emissions and identify the most cost-effective measures for meeting emissions targets.	DOE WSU CTED	DOE has a multiphase program underway. Phase 1 – Inventory and projection of greenhouse gas in Washington completed. Phase 2 – Greenhouse gas mitigation Option for Washington State completed. The "Greenhouse Gas Emissions Inventory for Washington State, 1990," was published by WSEO in 1994. WSU has completed a brief update of that document which brings the emissions data up to 1995.
The State should urge our Congressional delegation to support a national carbon dioxide and greenhouse gas emission target.	DOE CTED	As part of the 1997 Kyoto protocol on greenhouse gas reduction, U.S. negotiators agreed to reduce U.S. emissions to 7% below a 1990 baseline by the period 2008-2012. Ratification of the treaty is not expected to occur until 2000, at the earliest. CTED working with other state and federal agencies and nonprofit groups to promote policies which reduce greenhouse gas emissions while expanding the state's energy efficiency and renewable energy industry.
Environmental Regulation and Energy Decision Making		
BPA and the State's electric utilities should incorporate quantifiable costs, including environmental costs, into least-cost planning and modeling.	UTC CTED	No current action. In 1999 the UTC will be conducting a review of its Integrated Resource Planning rules as contained in WAC 480-107 in compliance with the Governor's executive order. BPA considers some environmental costs in its least cost planning. However, it argues that the opening of the competitive wholesale power market has made consideration of environmental costs very difficult. Otherwise, the majority of utilities in Washington State are not doing this. As of this writing, utility least cost plans indicate no new resource needs for a period of 10-15 years.
The State encourages more comprehensive assessment of environmental costs in all energy sectors, not just electricity planning.	UTC CTED	No recent progress on this recommendation.

Siting Energy Facilities		
The Governor should instruct his cabinet to focus its attention on implementing the provisions of the State energy strategy using existing rules, but avoiding costly duplication and ensuring rapid decision making.	CTED (EFSEC)	Executive Order 94-01 and Chapter 207, Laws of 1994 make the Energy Strategy the primary guide for implementing the State's energy policy.
WSEO *(now CTED)* should take the lead in ensuring that supply and conservation projects consistent with the strategy receive fair and rapid treatment by the many state, federal, and local agencies that must review them.	CTED (EFSEC)	EFSEC provides a coordinated one-stop siting process for energy facilities 250 megawatts or greater. Local governments shall appoint members to EFSEC when the energy facility is in their jurisdiction.
BPA and investor-owned utilities should consider funding generic impact investigations, particularly for renewable technologies, so as to narrow the number of issues requiring study during actual siting.	UTC CTED	In a restructured electric utility environment, private energy developers (merchant plants) may be predominant in the development of energy facilities, not BPA or regulated utilities.
The Legislature should form a siting review panel, similar to the State Environmental Policy Act Review Panel of 1982-83, to develop revised state siting procedures and legislation to implement them.	CTED (EFSEC)	Completed. No legislation was passed.

Effective July 1, 1996, legislation closed the Washington State Energy Office and transferred its programs and functions to the following agencies:

Energy resource policy and planning; administration of energy program grants; and the Energy Facility Site Evaluation Council.	**CTED**	Department of Community, Trade & Economic Development; Energy Division	http://www.energy.cted.wa.gov
Energy efficiency work related to public sector facilities.	**GA**	Department of General Administration	http://www.ga.wa.gov/eascust.htm
Support programs and resources for carrying out the CTR law, including administrative support for the CTR Task Force.	**DOT**	Department of Transportation	http://www.wsdot.wa.gov
Energy programs focusing on energy resources, applied research, industrial, software, telecommunications, education/information, technology transfer, public sector training and technical assistance, energy codes and the Energy Ideas Clearinghouse.	**WSU**	WSU Energy Program	http://energy.wsu.edu

Abbreviations and Websites for Agencies with responsibilities for recommendations in Washington's Energy Strategy

CTED	Department of Community, Trade & Economic Development, Growth Management Services	http://www.cted.wa.gov/growth
UTC	Utilities and Transportation Commission	http://www.wutc.wa.gov
DOE	Department of Ecology	http://www.wa.gov/ecology/
DIS	Department of Information Systems	http://www.wa.gov/dis
DOR	Department of Revenue	http://www.wa.gov/DOR/wador.html
SPI	Superintendent of Public Instruction	http://www.ospi.wednet.edu
NWPPC	Northwest Power Planning Council	http://www.nwppc.org
DNR	Department of Natural Resources	http://www.wa.gov/dnr/
HEC	Higher Education Coordinating Board	http://www.hecb.wa.gov
DOL	Department of Licensing	http://dol.wa.gov/